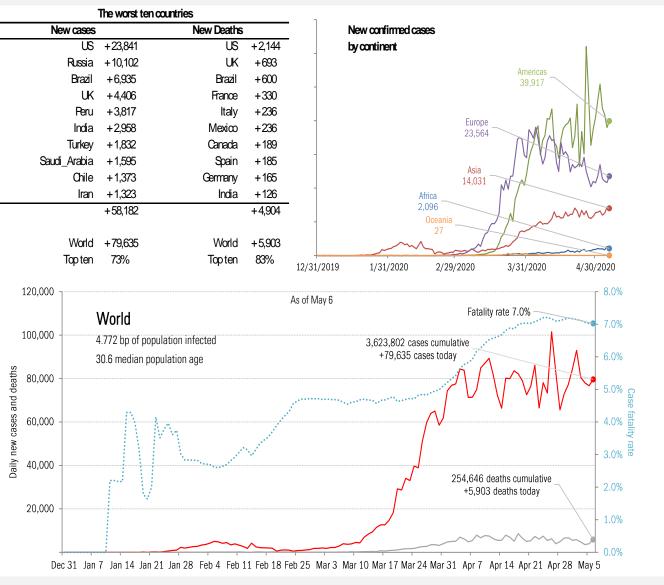


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Wednesday, May 6, 2020

The global scorecard



Source: ECDC, TrendMacro calculations

For more information contact us:

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Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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The US scorecard

National and state-by-state data do not line up because of different sources

New cases		New Deaths New i			hospital Ourne cases			Qume da	aths	Qume in	hospital
NJ	+2,324	PA	+554	NY	+536	NY	321,192	NY	19,645	NY	69,867
NY	+2,239	NJ	+334	FL	+217	NJ	130,593	NJ	8,244	СТ	7,758
IL	+2,122	NY	+230	MA	+209	MA	70,271	MA	4,212	MA	6,831
CT	+1,334	L	+176	OH	+ 147	IL	65,962	MI	4,179	FL	6,546
CA	+1,275	СТ	+ 138	MD	+138	CA	56,212	PA	3,012	GA	5,634
MA	+ 1,184	MI	+ 130	GA	+108	PA	50,957	IL	2,838	MD	5,337
TX	+ 1,037	MA	+ 122	VA	+ 103	MI	44,397	CT	2,633	VA	4,113
PA	+865	FL.	+113	NM	+80	Æ	37,439	CA	2,317	OH	3,956
VA	+764	СН	+79	MN	+79	TX	33,369	LA	2,115	CO	2,838
MD	+709	MD	+73	AL	+43	CT	30,621	R	1,536	WI	1,663
	+13,853		+1,949		+1,660		841,013		50,731		114,543
All states	+22,348	All states	+2,527	All states	+1,960	All states	1,195,605	All states	65,307	All states	129,357
Top ten	62%	Top ten	77%	Top ten	85%	Topten	70%	Top ten	78%	Top ten	89%
				F	ve most impro	wed US state	s				
Fewer daily cases		Fewer new deaths			Fewer new hospitalizations				Most recoveries		
GA	-423			LA -4	14		KY -98	i		TX	+701
NE	-411			NM -	7		NY -59			MN	+402
NY	-299			RI -	7		GA -25	;		TN	+275
R.	-277			AR -	6		R -17	,		W	+ 158
TN	-275			NE -	2		MD -10	1		OK	+ 148
60,000	11	1.04.4.4									^{9.0%}
		d States			As o	f May 6					0.00/
50.000		op of population infe			\sim						- 8.0%
50,000 -	38.1 me	8.1 median population age Fatality rate 5.71%							1%	1	
											- 7.0%
10.000											0.00/
40,000 -											- 6.0%
40,000 -		7,546,961 tes	sts cume					. /		1	5.000
								Λ	M		- 5.0%
					$M \wedge$	\mathcal{N}			$\xi / 1$		
30,000 -		258,992 tes	sts today	m	mh			/ / /	\vee V	′ <u> </u>	- 4.0%
30,000 -				~~~~							
30,000 -				1		1.	\wedge	1.00	4 475	s cumulative	- 3.0%
30,000 -			٨	N NIN	1h			· · · · · · · · · · · · · · · · · · ·			1
30,000 -		8.6% positi	ve today 🔨 🔥	NNM	M		/				
20,000 -		8.6% positi	ve today	NNM	Mh				4,475 cases 23,841 cas		- 2.0%
30,000 - 20,000 - 10,000 -		8.6% positi	ve today	MNM	Mr.		WA	+			
20,000 -		8.6% positi	ve today \bigwedge	MNM	Mh		deaths cumul	+ ative			- 2.0% - 1.0%
20,000 -		8.6% positi	ve today M	MNM	Mh) deaths cumul 44 deaths tod	+ ative			

Source: States and test data Covid Tracking Project, US data ECDC, TrendMacro calculations

Recommended reading

Exclusive: Government scientist Neil Ferguson resigns after breaking lockdown rules to meet his married lover

Anna Mikhailova, Michael Gillard and Louisa Wells The Telegraph May 5, 2020

How China's 'Bat Woman' Hunted Down Viruses from SARS to the New Coronavirus

Jane Qiu Scientific American April 27, 2020

Funeral Directors in COVID-19 Epicenter Doubt Legitimacy of Deaths Attributed to Pandemic, Fear Numbers are 'Padded'

Project Veritas April 30, 2020

Data show Americans are returning to normal life whether state and local officials like it or not

True Pundit May 5, 2020

Woodstock Occurred in the Middle of a Pandemic

Jeffrey A. Tucker American Institute for Economic Research May 1, 2020

New projection puts U.S. COVID-19 deaths at nearly 135.000 by August

Reuters May 4, 2020

Exclusive: Internal Chinese report warns Beijing faces Tiananmen-like global backlash over virus Reuters May 4, 2020

Who pays the bill? The coming deluge of pandemic litigation

Alex Barker, Kate Beioley and Jane Croft Financial Times May 5, 2020

Meme of the day

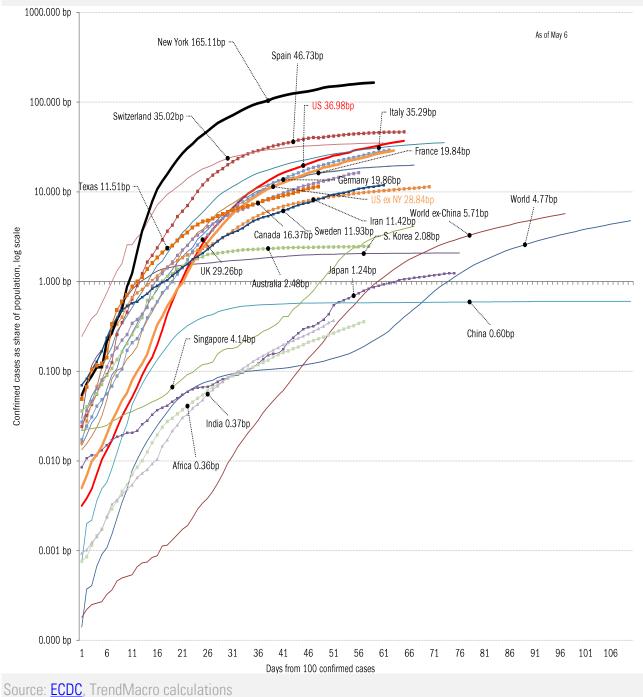


RELEASE THE MURDER HORNETS

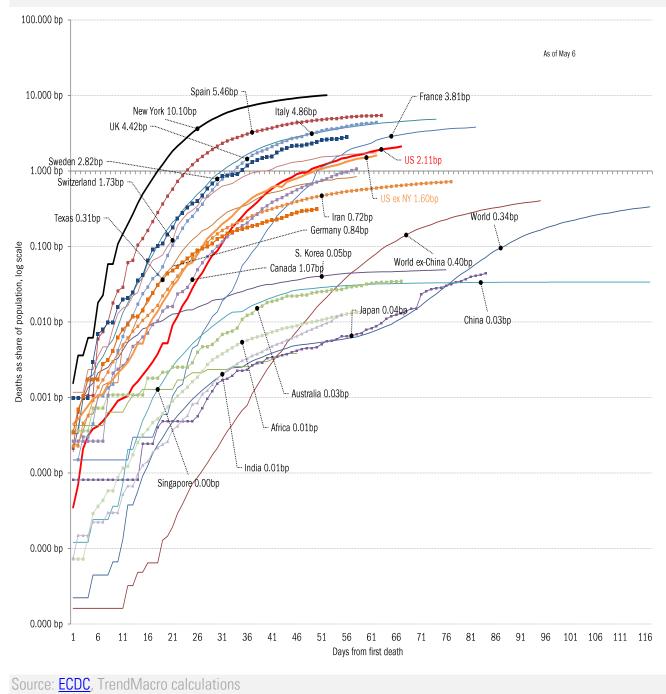
Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

FEAR OF CORONA IS ON THE DECLINE

The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*

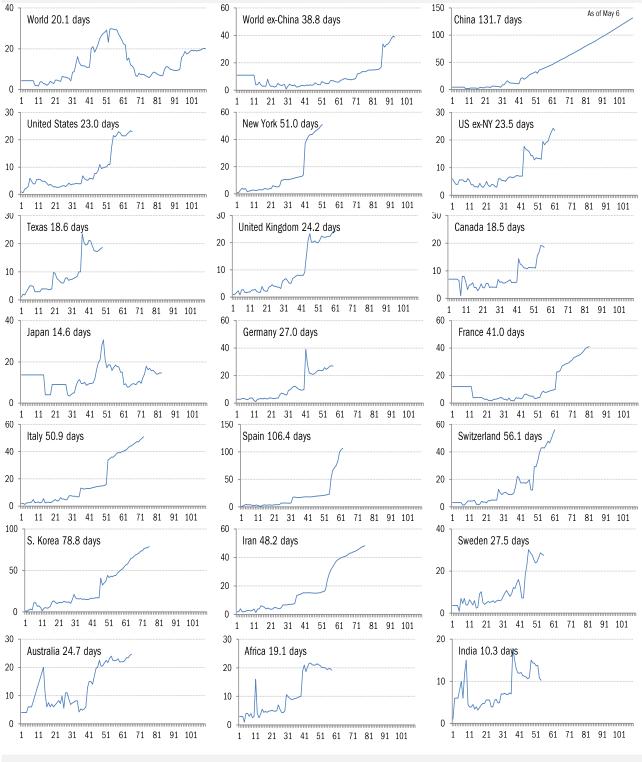


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*



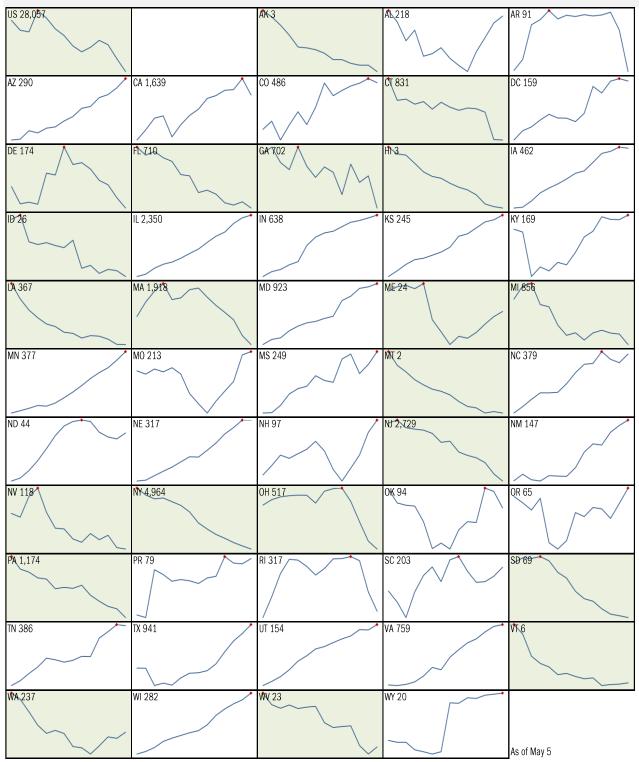
Our most reliable evidence of slowing the Moore's law of Covid-2019 *Vertical: number of days it takes to double deaths Horizontal: days from first death* Progress means seeing the line move up and to the right...

Extrapolated between actual doubling points. The most anomalous extrapolations are smoothed.



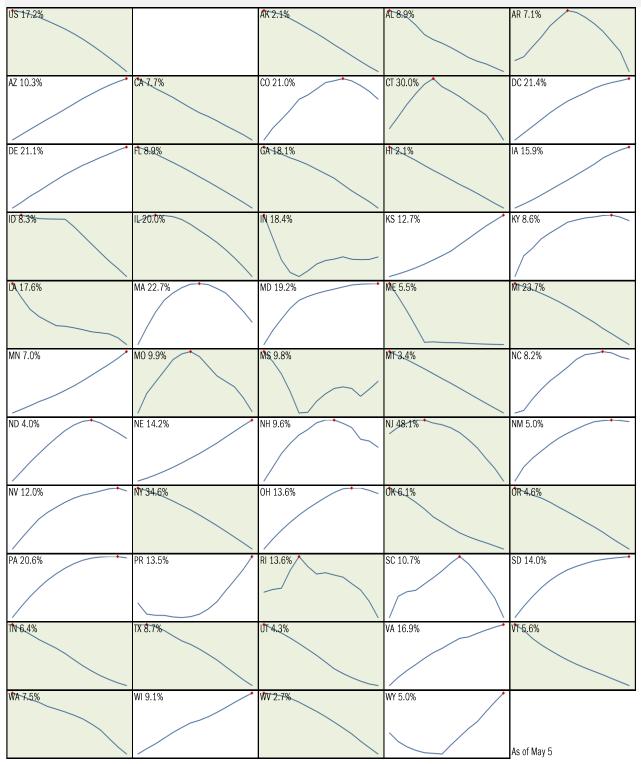
Source: <u>ECDC</u>, TrendMacro calculations

Requirement to Open Up America Again: 14-day "downward trajectory" in new cases 14-day moving average, last 14 days Most recent value displayed



Source: Covid Tracking Project, TrendMacro calculations

Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed*

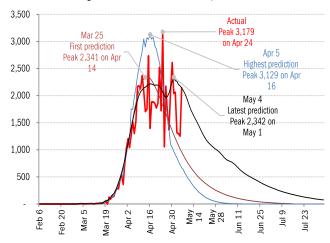


Source: Covid Tracking Project, TrendMacro calculations

Reality-checking the models: actuals versus IHME predictions

New daily fatalities

Actual versus first, highest and latest model mean predictions



For this day, versus all model mean predictions

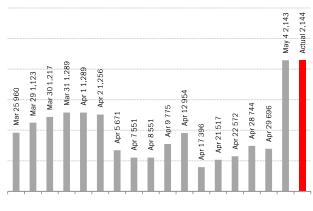
For this day, versus all model mean predictions

Apr 2 74,991 Apr 5 75,995

Apr 7 55,861 Apr 8 55,861 Apr 9 53,314

Mar 31 75,402

Mar 25 66,430 Mar 29 65,785 Mar 30 65,950 Apr 1 75,402



As of May 6

May 4 76,318

Apr 29 66,190

Apr 28 65,901

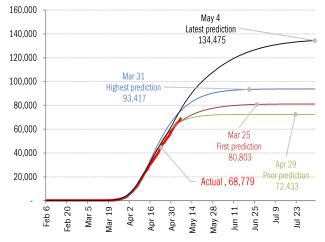
Apr 21 62,440 Apr 22 63,271

Apr 12 56,496 Apr 17 58,143 68,779

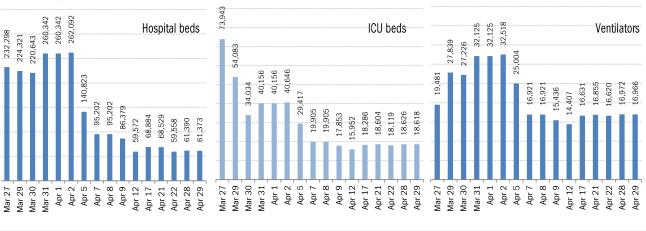
Actual

Cumulative fatalities

Actual versus first, highest and latest model mean predictions

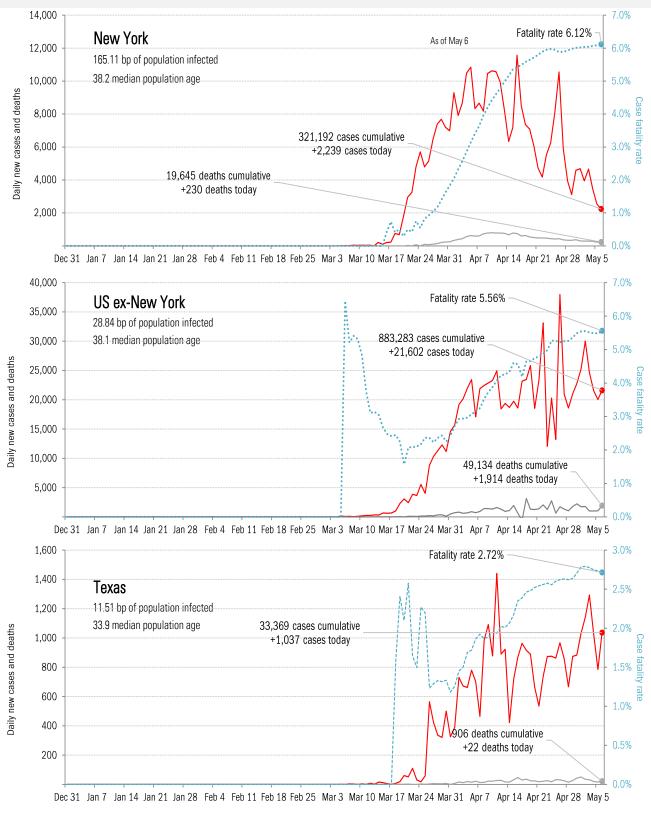


Healthcare system stress, peak estimated at each model revision



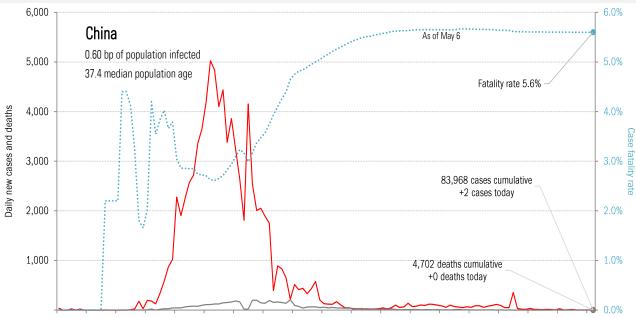
Source: ECDC, TrendMacro calculations

From Ground Zero to the Rio Grande

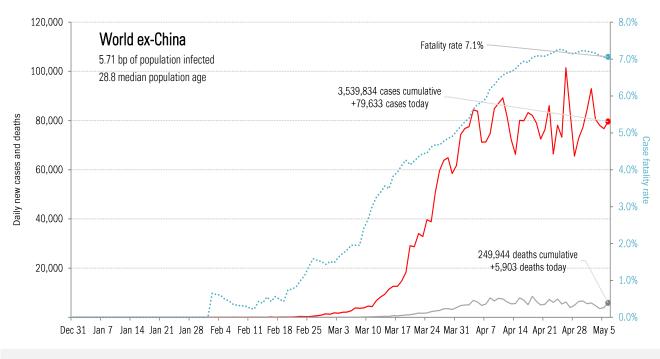


Source: <u>ECDC</u>, TrendMacro calculations

Patient zero... and then everyone else

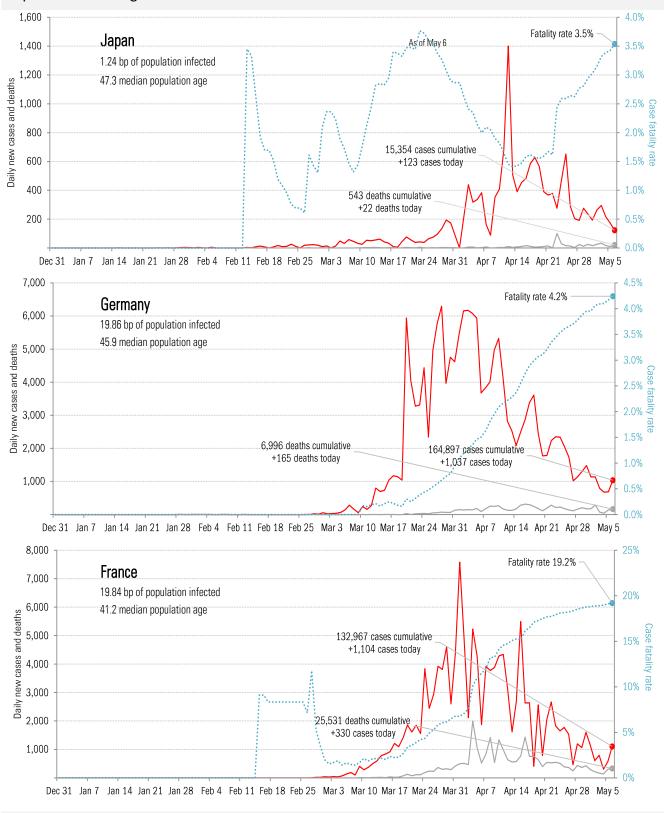


Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21 Apr 28 May 5



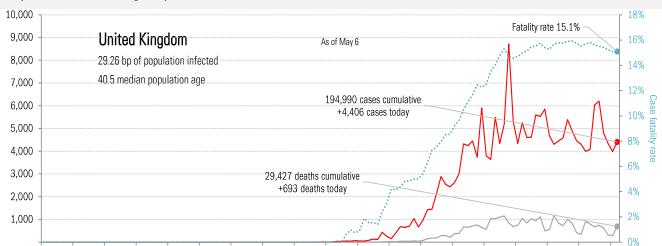
Source: ECDC, TrendMacro calculations

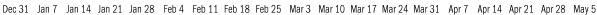
Impact in the largest economies

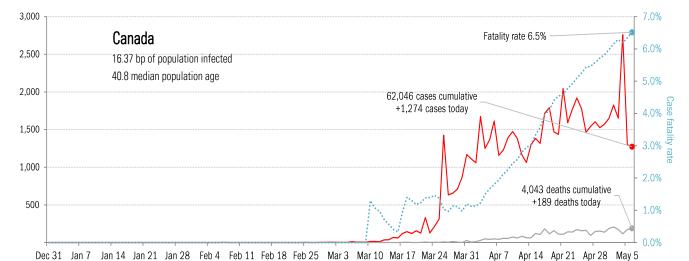


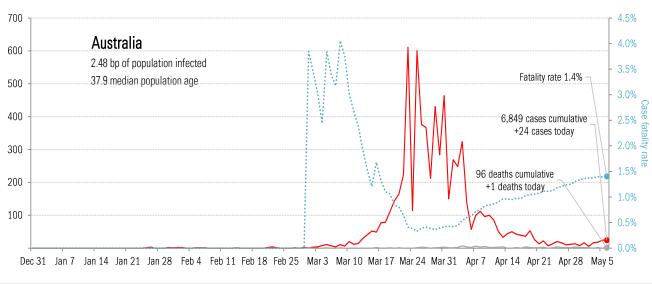
Source: ECDC, TrendMacro calculations

Impact in The Anglosphere



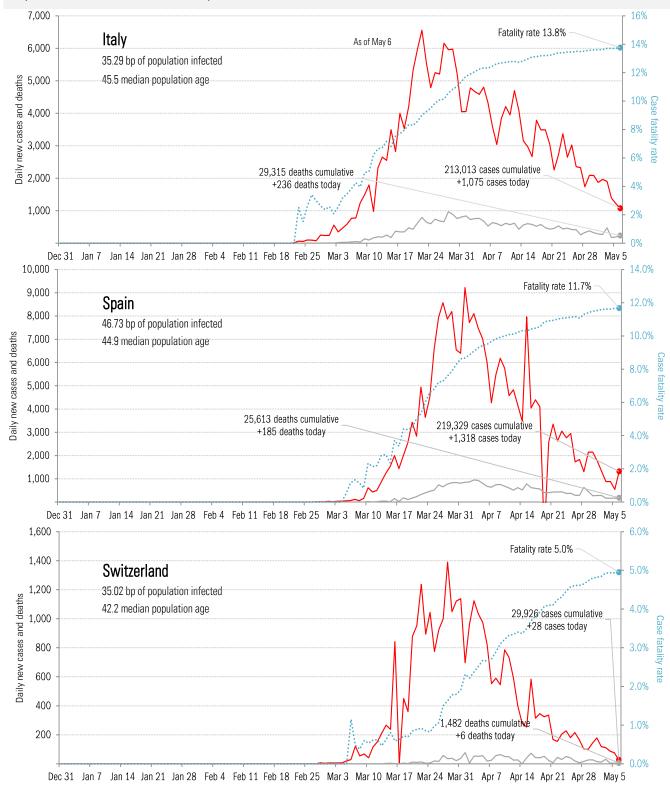






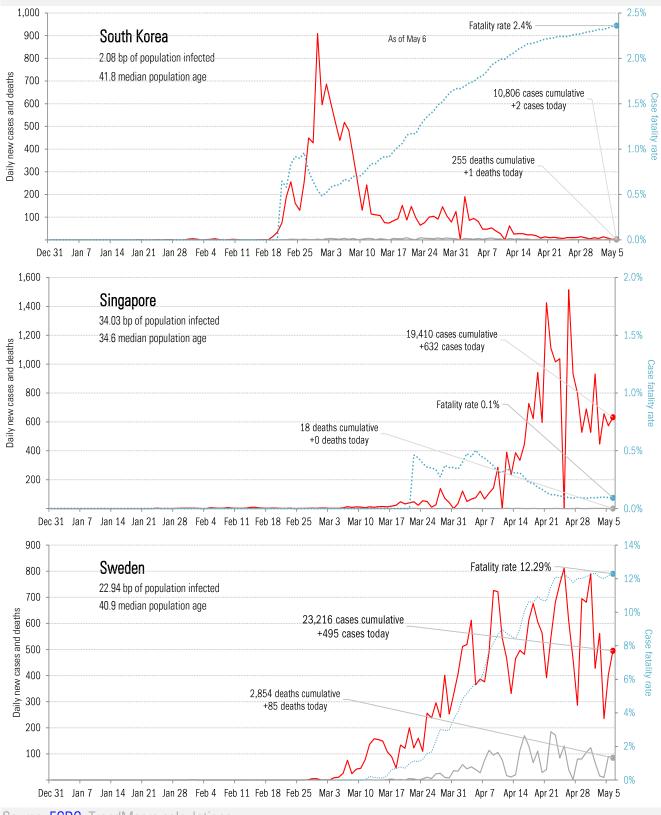
Source: ECDC, TrendMacro calculations

Impact in continental Europe



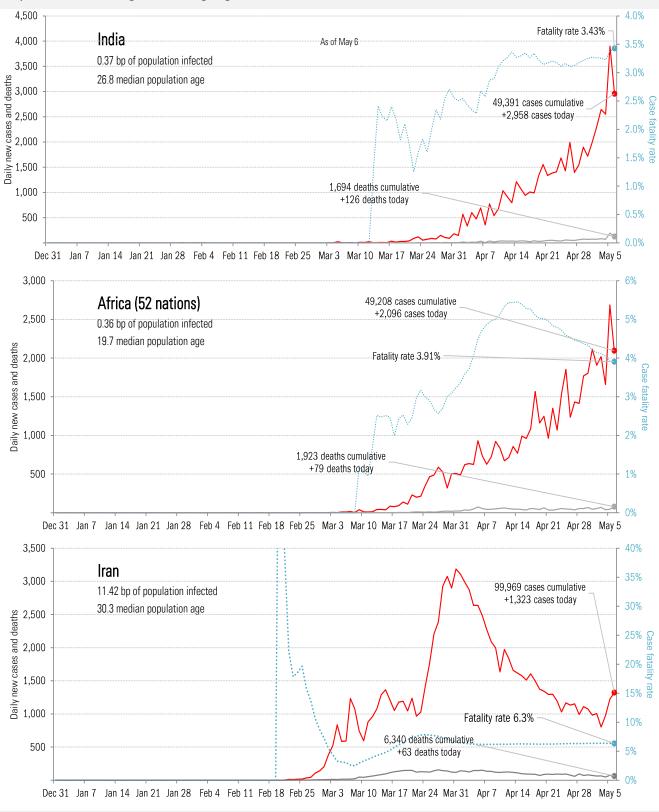
Source: ECDC, TrendMacro calculations

Impact in other hot-spots



Source: ECDC, TrendMacro calculations

Impact in the fragile emerging world



Source: ECDC, TrendMacro calculations